

Title (en)
PROCESS FOR PRODUCTION OF AN OLEFIN OXIDE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES OLEFINOXIDS

Title (fr)
PROCÉDÉ DE PRODUCTION D'UN OXYDE D'OLÉFINE

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Application
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Abstract (en)
The invention relates to a process for the epoxidation of an olefin, wherein the concentration of the olefin oxide in the outlet is greater than about 2.2 % by volume. More particularly, the invention relates to a process for the epoxidation of ethylene by contacting a feed including at least ethylene and oxygen with an improved epoxidation catalyst. The catalyst which has improved selectivity in the epoxidation process at high productivities, includes a solid support having a surface, which has a first mode of pores that have a diameter ranging from 0.01 μm to 5 μm and having a differential pore volume peak in the range from 0.01 μm to 5 μm . The surface also has a second mode of pores, which is different from the first mode of pores, having a diameter ranging from 1 μm to 20 μm and have a differential pore volume peak in the range from 1 μm to 20 μm . On the bimodal pore surface is a catalytically effective amount of silver or a silver-containing compound, a promoting amount of rhenium or a rhenium-containing compound, and a promoting amount of one or more alkali metals or alkali-metal-containing compounds.

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